IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

OEMADDLicant: LAEMMLE, B., et al. : : Atty Dkt. No.: 99 P 7475 US01

Serial No.: 09/506,640 :Examiner: To Be Assigned

:Group Art Unit: 2755 Filed: February 18, 2000

For: MONIKER METHOD, APPARATUS, :Date: August 24, 2000

SYSTEM AND ARTICLE OF

MANUFACTURE

#### Certificate of Mailing

I hereby certify that this correspondence, and all correspondence referred to herein, is being deposited with the U.S. Postal Service in an envelope containing sufficient postage as first class mail and addressed to Assistant Commissioner For Patents, Commissioner of Patents and Trademarks, Washington, D.C. 20231 on the date indicated below.

Morgana Heiss

THE ASSISTANT COMMISSIONER FOR PATENTS WASHINGTON, DC 20231

LETTER TO THE OFFICIAL DRAFTSMAN

SIR:

Transmitted herewith are ten (10) sheets of Formal Drawings for the above-identified application.

Applicant's undersigned attorney may be reached in our Iselin, New Jersey office by telephone at (732) 321-3009. correspondence should continue to be directed to our below-listed address.

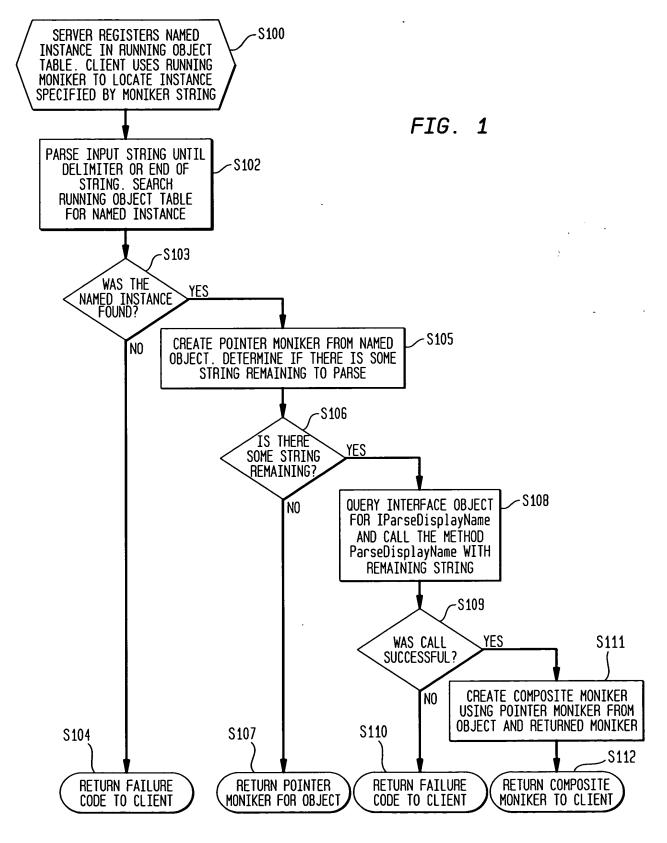
Respectfully submitted,

Marc Msperas

Red/. No. 37, 274 Dated: August 24, 2000

Siemens Corporation Intellectual Property Department 186 Wood Avenue South Iselin, NJ 08830 (732) 321-3009





Ä

### 2/10

# FIG. 2A

Running.idl

```
// Running.idl : IDL source for Running.dll
II
// This file will be processed by the MIDL tool to
// produce the type library (Running.tlb) and marshalling code.
import 'oaidl.idl';
import 'ocidl.idl';
        object,
               uuid(E7531917-289D-11D2-869F-080009DC2552),
               helpstring ("IRunning Interface"),
               pointer_default (unique)
        interface IRunning : IDispatch
                \hbox{\tt [id(l), helpstring("method RegisterInstanceName")]} \ \ \hbox{\tt HRESULT RegisterInstanceName} \ \ \hbox{\tt (BSTR bstring("method RegisterInstanceName")]} \\
ItemName, IUnknown * pUnk, long * lCookie);
               [id(2), helpstring("method UnregisterInstanceName")] MRESULT UnregisterInstanceName(long
lCookie);
        1:
uuid(E7531908-289D-11D2-869F-080009DC2552),
        version(1.0),
        helpstring ("Running 1.0 Type Library")
library RUNIINGLib
        importlib("stdole32.tib");
        importlib("stdole2.tib");
        [
               uuid(E7531918-289D-11D2-869F-080009DC2552),
               helpstring("Running Class")
        coclass Running
               [default] interface IRunning:
               interface IparseDisplayName:
        );
);
```

# FIG. 2B

Running.rgs

```
HKCR
      Running.1 = s 'Running Class'
              CLSID = s '(E7531918-289D-11D2-869F-080009DC2552)'
      Running = s "Running Class"
              CLSID = s ; (E7531918-289D-11D2-869F-080009DC2552) "
      NoRemove CLSID
              ForceRemove (E7531918-289D-11D2-869F-080009DC2552) = s 'Running Class'
                      val AppID = s '(E7531918-289D-11D2-869F-080009DC2552)'
                      ProgID = s 'Running.1'
                      VersionIndependantProgID = s 'Running'
                      ForceRemove 'Programmable'
                      InprocServer32 = s "%MODULE%"'
                              val ThreadingModel = s 'Apartment'
              )
      NoRemove AppID
              NoRemove (E7531918-289D-11D2-869F-080009DC2552) = s 'Running Class'
                      val DllSurrogate = s''
      )
```

# 4/10

```
CRunning.h
                                                           FIG. 2C
// CRunning.h : Declaration of the CRunning
#ifndef_RUNNING_H_
#define_RUNNING_H_
#include "resource.h"
                           // main symbols
// CRunning
class ATL_NO_VTABLE CRunning :
     public CComObjectRootEx<CComSingleThreadModel>,
     public CComCoClass<CRunning, &CLSID_Running>,
     public IDispatchImpl<IRunning, &IID_IRunning, &LIBID_RUNNINGLib>,
     public IParseDisplayName
public:
      CRunning()
             ATLTRACE(_T("CRunning() constructor called\n"));
     virtual -CRunning()
             ATLTRACE(_T("CRunning() destructor called\n"));
DECLARE_REGISTRY_RESOURCEID(IDR_RUNNING)
BEGIN_COM_MAP(CRunning)
     COM_INTERFACE_ENTRY (IRunning)
      COM_INTERFACE_ENRTY(IDispatch)
      COM_INTERFACE_ENTRY(IparseDisplayName)
END_COM_MAP()
//IParseDisplayName method
      STDMETHODIMP ParseDisplayName(IBindCtx *pbc
                                                        .LPOLESTR pszDisplayName
                                                        ,ULONG *pchEaten
                                                        .IMoniker **ppmkOut
                                                        );
protected:
      const wchat_t* ProgID() ( return L"Running"; )
  const wchar_t* VersionIndependentProgID() ( return L*Running.1*; )
// IRunning
public:
      STDMETHOD(RegisterInstanceName) (long lCookie);
      STDMETHOD(UnregisterInstanceName) BSTR bstrItemName, IUnknown * pUnk, long * ICookie);
);
#endif //_RUNNING_H_
```

### 5/10

```
// CRunning.cpp : Implementation of CRunning
                                                                          FIG. 2D
#include 'stdafx.h'
#include "Running.h"
#include "CRunning.h"
#define BAD_POINTER_RETURN(p) if(!P) return E_POINTER
#define BAD_POINTER_RETURN_OR_ZERO(p) if(!P) return E_POINTER; else *p = 0
#define SIZE_OF_STRING(p) !p ? 0 : ((wcslen(p) * sizeof(wchar_t)) + sizeof(wchar_t))
#define OLE MAXNAMESIZE 256
// CRunning
STOMETHODIMP CRunning::RegistrationInstanceName(BSTR bstrItemName, IUnknown * pUnk, long * lCookie)
       AFT_MANAGE_STATE(AfxGetStaticModuleState())
       // TODO: Add your implementation code here
       ATLTRACE(_T("CRunning::RegisterInstanceName called\n"));
       HRESULT hr = E_FAIL;
       LPRUNNINGOBJECTTABLE prot = NULL;
       hr = GetRunningObjectTable(0,&prot);
       if(SUCCEEDED(hr))
              LPMONIKER
                            ppmk = NULL:
              hr = CreateItemMoniker(NULL,bstrItemName,&ppmk);
              if(SUCCEEDED(hr))
                      hr = prot->Register(0
                                                            .pUnk
                                                            , ppmk
                                                            ,(unsigned long *)lCookie
                      if(SUCCEEDED(hr))
                             TRACE(_T("CRunning::RegisterInstanceName register succeeded cookie is %x\
n"),(unsigned long*)*lCookie);
                      else
                             TRACE(_T("CRunning::RegisterInstanceName register failed %x \n"),hr);
                      ppmk->Release();
              )
              else
                      TRACE(_T("CRunning::RegisterInstanceName CreateItemMoniker failed %x \n"),hr);
              prot->Release();
       else
              TRACE(_T("CRunning::RegisterInstanceName get ROT failed %x \n").hr);
       return hr:
STDMETHODIMP CRunning::UnregisterInstanceName (long lCookie)
       AFX_MANAGE_STATE(AfxGetStaticModuleState())
       // TODO: Add your implementation code here
       HRESULT hr = E_FAIL;
```

6/10

CRunning.cop

FIG. 2E

```
if(lCookie)
              LPRUNNINGOBJECTTABLE prot = NULL;
              hr = GetRunningObjectTable(0,&prot);
              if (SUCCEEDED (hr))
                      hr = prot->Revoke((unsigned long) lCookie);
                      if(SUCCEEDED(hr))
                              TRACE(_T("CRunning::UnregisterInstanceName worked for cookie %x \n"),(uns
igned long) lCookie);
                      else
                              ATLTRACE(_T("CRunning::UnregisterInstanceName Revoke failed\n"));
                      prot->Release():
              ١
              else
                      ATLTRACE(_T("CRunning::UnregisterInstanceName GetROT failed\n"));
        return hr;
1-
STDMETHODIMP CRunning::ParseDisplayName(
      IBindCtx*
                   pbc.
      LPOLESTR
                   pwszDisplayName.
      ULONG*
                   pchEaten,
      IMoniker**
                   ppmkOut)
          AFX_MANAGE_STATE(AfxGetStaticModuleState())
          ATLTRACE(_T("CRunning::ParseDisplayName() with %S/n"),pwszDisplayName);
          BAD_POINTER_RETURN_OR_ZERO(ppmkOut);
      BAD_POINTER_RETURN_OR_ZERO(pchEaten);
      BAD_POINTER_RETURN(pbc):
      BAD_POINTER_RETURN(pwszDisplayName);
      BAD_POINTER_RETURN(pchEaten);
          ATLTRACE(_T("CRunning::ParseDisplayName() pointers OK!\n"));
          HRESULT hr =E_FAIL;
          // set to max for now
          // need to change to fit MkParseEx
          if(*pwszDisplayName == L'0')
                  * pchEaten = wcslen(L*@Running*);
                  * pchEaten = wcslen(L"Running");
          // as far as i have been able to find oud
          // MkParse will pass the 0, wrong!!
          // oh no!!! MkParseEx doesn't pass the @!!
          // we've got to fix this, so let's look for ":"
          wchar_t * pwszInstance = wschr(pwszDisplayName,L':');
          // do we have an instance?
          if)pwszInstance)
                  ATLTRACE(_T("CRunning::ParseDisplayName() instance name %S/n"),pwszInstance);
                  WCHAR
                                 szItemName(OLE_MAXNAMESIZE);
                  LPWSTR
                                 lpszDest
                                                   szItemName;
                  LPWSTR
                                 lpszSrc
                                                    = pwszInstance;
                  int
                                        cEaten = 0;
```

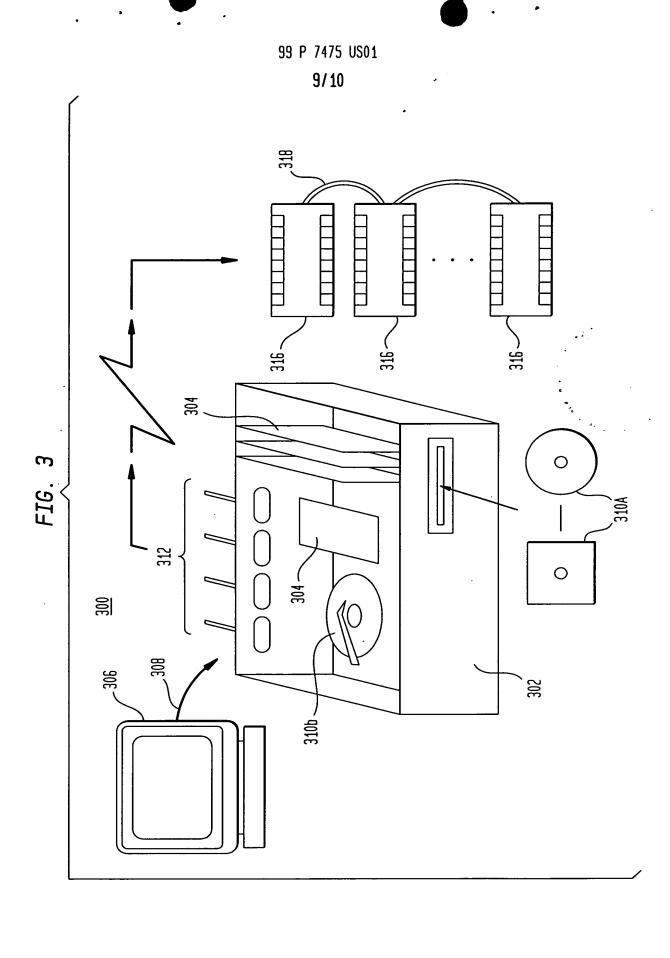
## 7/10

```
CRunning.cop
// eat delimiter characters until next token
          (*lpszSrc != L'\0'&& (*lpszSrc == L'\\'|| *lpszSrc == L'/' ||
while
                                                                                          FIG. 2F
        *lpszSrc == L ':' || *lpszSrc == L'!' || *lpszSrc == L '('))
(
        ++lpszSrc;
        ++cEaten;
// parse next token in szItemName
while (*lpszSrc != L'\0' && *lpszSrc != L'\\' && *lpszSrc != L'/' &&
                *lpszSrc != L':' && *lpszSrc != L'!' && *lpszSrc != L'(' &&
                cEaten < OLE_MAXNAMESIZE-1)
1
        *lpszDest++ = *lpszSrc++;
        ++cEaten:
*ochEaten += cEaten:
*lpszDest = 0;
// find the running object
LPRUNNINGOBJECTTABLE
                         prot = NULL:
                                penum = NULL:
LPENMMONIKER
                                        ppmk = NULL:
LPMONIKER
hr = CreateItemMoniker(NULL,szItemName,&ppmk);
ATLTRACE(_T("CRunning::ParseDisplayName() CreateItemMoniker %x\n"),hr);
if (SUCCEEDED(hr))
       // look in the running object table to find the gizmo
       // since we are a moniker provider we can t use
       // the bind context to get the ROT
       hr = GetRunningObjectTable(0, &prot);
       ATLTRACE(_T("CRunning::ParseDisplayName() GetRunningObjectTable %x\n"),hr);
       if (SUCCEEDED(hr))
              hr = prot->EnumRunning(&penum);
               ATLTRACE(_T("CRunning::ParseDisplayName() EnumRunning %x\n"),hr);
               if(SUCCEEDED(hr))
                                                           = NULL:
                      IMoniker
                                           ppmkTest
                      IMoniker
                                           ppmkResult
                                                           = NULL:
                      IUnknown
                                          pUnk
                                                           = NULL:
                                           bFound
                                                           = FALSE;
                      while((penum->Next(1, &ppmkTest, NULL) == S_OK)&&(!bFound))
                             hr = ppmk->IsEqual (ppmkTest);
                             if(hr == S_OK) // not SUCCEEDED!!
                                    TRACE(_T("CRunning::ParseDisplayName() we found it\n"));
                                    bFound = TRUE
                                    hr = prot->GetObject (ppmkTest, &pUnk);
                                    if(hr == S_OK) // not SUCCEEDED!!
                                           TRACE(_T("CRunning::ParseDisplayName() we got it")'):
                                           hr = CreatePointerMoniker (pUnk, &ppmkResult);
                                           if(SUCCEEDED(hr))
                                                  TRACE(_T("CRunning::ParseDisplayName() created pointer moniker\n"));
                                                  IParseDisplayName
                                                                           * pParse = NULL;
                                   IMonikerpItem
                                                                              Moniker = NULL;
                                   ULONG
                                                                               ucEaten
```

8/10

CRunning.cpp

```
// we'll give him the part that i
  s correct
                                                                       // and he can do whatever he want
  s to with it
                                                                       *ppmkOut = ppmkResult;
                                                                       // is there any string to parse?
                                                                       if(*lpszSrc != L'\0')
                                                                                 hr = pUnk->QueryInterface
  (IID_IParseDisplayName, (void **) &Parse);
                                                                                 if(SUCCEEDED(hr))
                                                                                         hr = t pParse->Pars
  eDisplayName(pbc, 1pszSrc,&ucEaten, &pItemMoniker);
                                                                                        if(SUCCEEDED(hr))
                                                                                                *pchEaten
 += ucEaten;
                                                                                                hr = ppmk
 Result->ComposeWith(pItemMoniker, FALSE, ppmkOut):
                                                                                                if(SUCCEE
 DED(hr))
                                                                                                        T
$\fracE(_T("CRunning::ParseDisplayName() It worked!!!\n"));
  / we can release the constituant elements
 / of the composite
 pmkResult->Release();
                                                                                                // if we
 succeed or fail we can release the
                                                                                                // item m
 oniker
                                                                                                pItemMomi
 ker->Release();
                                                                                        pParse->Release()
                                                                )
                                                        )
                                                 ppmkTest->Release();
                                         if(lbFound)
                                                 hr = E_FAIL;
                                         penum->Release();
                                 prot->Release();
                         ppmk->Release();
     return hr;
```



99 P 7475 US01 10/10

FIG. 4

